

John Alexander Bartucz

210 LES, 1954 Buford Avenue, St Paul, MN 55108

Phone: (612) 625-7111 Email: jbartucz@umn.edu Website: www.bartucz.com

University of Minnesota – PhD in Learning Technologies	June 2025 expected
Winona State University – Master’s in Education	June 2014 – Aug 2015
University of Minnesota – Master’s in Computer Science	Sep 2004 – June 2007
Princeton University – Bachelor of Science in Computer Science	Sep 1993 – June 1997

University of Minnesota *Minneapolis, MN* August 2022 – present

Teaching Specialist, Learning Technologies in Curriculum and Instruction

- Instructor: CI4312 & CI4311W – Introduction to Technology and Ethics in Society
- Program Coordinator for CI 5307: Computer Science for K12 Educators
- Research: Data Science for Social Justice with St. Paul Public School teachers
- LT Master’s students advisor
- Average Student Ratings: 5.8 / 6

Rochester Community and Technical College *Rochester, MN* September 2018 – present

Adjunct Professor, Computer Science

- Comp 1150, 1751, 2243 – Introductory programming in Python, Java, and JavaScript
- Comp 2247 – Algorithms and Data Structures (Python)
- Concurrent Enrollment Advisory Board and Computer Science Curriculum Committee

Winona State University *Rochester, MN* January 2018 – June 2019

Adjunct Professor, Computer Science

- Created and Taught CS485 – Advanced Database Systems Design

Rochester Public Schools *Rochester, MN* July 2014 – July 2022

Computer Science Department Chair, Teacher, Curriculum Designer

- Created High School CS/IT curriculum pathway for all Rochester Public Schools
 - Designed and taught programming, security, infrastructure, and data science classes
 - Increased underrepresented participation in CS from 5% to 27% in four years
 - Increased number of CS courses at each school from one to seven
- CTECH Tech integrationist, Staff Development Chair, Equity Lead Teacher

Rochester Area Youth Tech Foundation, Founder, President January 2018 – present

- WiFi Hotspot checkout program and laptop recycling program for students in need

Computer Science Teachers Association of Minnesota – President Sep 2020 – 2022

Education Testing Services – AP Computer Science Exam Reader June 2018 – 2022

University of Wisconsin Stout – GenCyber Curriculum Design June 2018

Community Structure Consulting, President January 2003 – September 2014

- Co-designed and implemented the IBM Smart Business Platform Inventory system
- Managed multiple teams of developers and graphic designers across North America and India
- Detailed requirements analysis, fixed-cost proposals and ongoing customer management
- Database-backed web development on servers with up to 50,000 unique visitors per month

Morgan Stanley New York, NY and London, England June 1997 – January 2003

Associate, Process Driven Trading

- Created real-time strategies to simultaneously trade thousands of stocks using C/C++
- Analyzed the resulting costs of trading using quantitative statistical methods
- Evaluated and maintained relationships with vendors, brokers, and systems support

Awards:

- 2020 Minnesota Recipient of the National Center for Women in Technology (NCWIT) Aspirations in Computing (AiC) Educator Award, which identifies exemplary educators who play a pivotal role in encouraging students who self-identify as women, genderqueer, or non-binary to explore their interest in computing and technology.

Posters and Paper Presentations:

Chen, B., Scharber, C., DeLiema, D., Bartucz, J., Jeon, T., Rao, V., & Mora, B. E. (2023, June). *DataX: Exploring justice-oriented data science with secondary school students*. Poster presented at the Data Science Education: Structured Poster Session of the DRK-12 Annual Meeting.

Chen, B., Bartucz, J., Scharber, C., Rao, V., & DeLiema, D. (2023, April). *Toward a framework for justice-oriented data science education in K-12 Schools*. Paper presented at the annual AERA conference, Chicago, IL.

Bartucz, J., Jeon, S., Chen, B., DeLiema, D., & Scharber, C. (2023, March). *DataX: Exploring justice-oriented data science with secondary school students*. Poster presented at the annual UMN CEHD Research Day

Invited Lectures and Panels:

- SSC Educator Fall Forum 2022: “Using Discord in the Classroom to Create Connections”
- MNCodes Spring Summer 2021: “Increasing Diversity in Computer Science Classrooms”
- University of Minnesota, December 2020: “Create your own adventure with Twine”
- Southeast Service Cooperative, Apr & Sep 2019: “Create your own adventure with Twine”
- Univ. of Minnesota Codes Summit – Panel, May 2018: “What is the future of CS Education?”
- Southeast Service Cooperative, April 2018: “What is Computational Thinking?”
- Southeast Service Cooperative, April 2017: “Breaking the Silo: CS in Every Classroom”
- Willow Creek Professional Development Day, February 2015: “Google Apps for Everyone”
- Minnesota Middle School Association, November, 2014: “Two Sides of the Technology Coin”
- University of Minnesota, February 2005: “Hardware, Software and the Human Trader”
- University of Minnesota, Nov 2003: “Designing an Intelligent Agent for Market Simulation”

Volunteer Experience:

- CS4All-Minnesota, Advisor 2020-present
- Founder and Mentor, Rochester Computer Club, 2019-present
- University of Minnesota Rochester Co-Lab Community Advisor, 2020-2022
- Boys and Girls Club of Rochester: CoderDojo founder and mentor, 2018-2021
- Rochester Homeless Youth Resources Website Design and Maintenance, 2018-2019
- Mayo “High School Hackers” club preparing for U of M Hackathon, 2018-2021
- Century High School “Project Anything” preparing for U of M Hackathon, 2018-2021